

MATERIAL SAFETY DATA SHEET



SOLARIS

DATE PREPARED: 07/27/1995

MSDS No: 3902

ORTHO® WEED-B-GON® Lawn Weed Killer

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ORTHO® WEED-B-GON® Lawn Weed Killer

PRODUCT DESCRIPTION: Herbicide

MANUFACTURER

The SOLARIS Group

of Monsanto Company

P.O. Box 5008

San Ramon, CA 94583-0808

EPA REG. NO.: 239-2342A PN: 5088-G

24 HR. EMERGENCY TELEPHONE NUMBERS

Emergency Phone 800-454-2333

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt. %</u>	<u>CAS Registry #</u>
DMA Salt Of 2,4-D, Dimethylamine salt of 2, 4-Dichlorophenoxyacetic acid	10 .8	2008-39-1
Dimethylamine salt of 2-(2-methyl 1-4-chlorophenoxy) propionic acid	11 .6	32351-70-5
INERT INGREDIENTS	~ 77 .6	

"Inert Ingredients" is a term defined by the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (40 CFR 158.153). It refers to any substance, other than an active ingredient, which is intentionally added to a pesticide product. Some inert ingredients may be hazardous chemicals, as defined by the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). The hazards associated with these inert ingredients have been included in this document.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Brown or black uniform liquid with amine odor.

IMMEDIATE CONCERNS: - CORROSIVE TO EYES

- CAUSES EYE DAMAGE
- HARMFUL IF SWALLOWED
- AVOID CONTACT WITH SKIN OR CLOTHING
- KEEP OUT OF REACH OF CHILDREN

POTENTIAL HEALTH EFFECTS

EYES: The undiluted product is corrosive to the eyes. Eye contact may include discomfort, tearing, swelling, redness, and blurred vision. See Toxicological Information, section 11.

SKIN: The undiluted product is considered a moderate skin irritant, therefore contact with the skin can cause prolonged (days) injury to the affected area. The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment. Skin irritation may include redness, itching and swelling. This substance is considered slightly toxic to internal organs if absorbed through the skin. See Toxicological Information, section 11.

INGESTION: This substance is slightly toxic to internal organs if swallowed. The degree of injury will depend on the amount absorbed from the gut. See section 11, Toxicological Information.

INHALATION: If inhaled, this substance is considered practically non-toxic to internal organs. See section 11, Toxicological Information.

4. FIRST AID MEASURES

EYES: Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Call a physician.

SKIN: Thoroughly wash hands and exposed skin with soap and water. If irritation develops, get medical attention. Remove contaminated clothes and launder separately. If clothing is saturated, remove as soon as possible and shower.

INGESTION: If swallowed, give water or milk to drink and telephone for medical advice (800-457-2022 OR 800-454-2333). DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then immediately take the person and product container, with label, to the nearest medical emergency treatment center or hospital.

INHALATION: If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

ADDITIONAL INFORMATION: In case of medical emergencies involving this product, call day or night, (800) 454-2333.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: >200°F TAG CC

EXTINGUISHING MEDIA: CO₂, dry chemical, foam and water fog.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of nitrogen. Incomplete combustion can produce carbon monoxide.

FIRE FIGHTING PROCEDURES: Smoke from fires involving this material may present unusual hazards. Avoid breathing smoke and mists. Avoid contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Read the entire document.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Soak up spilled material with paper towels and discard in trash.

LARGE SPILL: Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgate, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section 13. "DISPOSAL". Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water.

For liquid spills that soak into the ground, contact the applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section 13 "DISPOSAL" for instructions.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a drum or other non-leaking container and disposed of in accordance with instructions provided under Section 13 "Disposal". Any recovered spilled liquid should be similarly collected and disposed of.

Do not contaminate water, foodstuffs or feed by storage or disposal.

GENERAL PROCEDURES: Observe all protection and safety precautions when cleaning up spills -- see Section 8. "EXPOSURE CONTROLS/PERSONAL PROTECTION". For help with any spill, leak, fire or exposure involving this material, call day or night (800) 454-2333.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Avoid contamination of feed, foodstuffs fertilizers, seeds, insecticides, or fungicides. Store in a cool dry place, preferably in a locked storage area. Do not store diluted spray.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: No special ventilation is normally required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standards (in Section 8), then special ventilation may be required.

PERSONAL PROTECTION

EYES AND FACE: Do not get this material in your eyes. Eye contact should be avoided by wearing chemical goggles or a face shield.

SKIN: Wear protective clothing when handling or applying this product including long pants, long sleeved shirt, socks, shoes, and chemical resistant gloves. Wash nondisposable gloves thoroughly with soap and water before removing. Remove contaminated clothing and launder separately before reuse. Promptly and thoroughly wash hands and exposed skin with soap and water after using this product.

RESPIRATORY: Handling of the undiluted product is not likely to present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which produces a heavy vapor or mist, workers should put on respiratory protection equipment. Consult respirator manufacturer to determine appropriate type of equipment. Observe respirator use limitations specified by NIOSH MSHA or the manufacturer.

For application of product diluted in accordance with label instructions, no special respiratory protection is required.

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

EXPOSURE LIMITS

<u>Chemical Name</u>	<u>OSHA PELACGIH TLVACGIH STEL</u>		
Dimethylamine salt of 2, 4-Dichlorophenoxyacetic acid	None	10 mg/m ³	None
Dimethylamine salt of 2-(2-methyl 1-4-chlorophenoxy) propionic acid	None	None	None
Nonylphenol Emulsifier	None	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

APPEARANCE: Dark black/brown liquid with amine odor

pH: 8.0 to 10.0

SOLUBILITY IN WATER: Soluble

DENSITY: 8.81 lbs/gal. at 20°C

VISCOSITY: Same as water.

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

HAZARDOUS DECOMPOSITION: Exposure to heat or flame may produce carbon monoxide, hydrogen chloride and nitrogen oxides.

INCOMPATIBLE MATERIALS: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: Based on the results of the rabbit irritation test, this product is considered to be slightly irritating to the eyes. No ocular opacity or iritis was observed during the seven day observation period. Moderate conjunctival redness was observed in all rabbits at the 1 and 24 hour readings, slight at the 48 hour reading. Most eyes were normal by 72 hours.

DERMAL LD₅₀: The results of the rabbit skin irritation study found moderate to severe erythema through 48 hours. Erythema decreased to slight to moderate by Day 7. No to well-defined erythema was seen at Day 14. Dry and flaky skin was observed at both day 7 and 14. (EPA FIFRA

Toxicity Category II). The dermal LD50 in rabbits is greater than 5 g/kg. (EPA FIFRA Toxicity Category IV). Results of the Buehler delayed contact hypersensitivity test on guinea pigs indicate that this product is a weak sensitizer. Sensitization responses were observed in 2/20 test animals.

ORAL LD₅₀: The oral LD50 in male and female rats is 3.0 and 2.9 g/kg, respectively.

INHALATION LC₅₀: Found to be practically nontoxic to rats following a 1-hour inhalation exposure; the inhalation LC50 is >13.7 g/L .

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No data available.

ECOTOXICOLOGICAL INFORMATION: This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not apply directly to water. Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D and MCPP have been associated with mixing and disposal sites. Exercise caution when handling pesticides to prevent contamination of groundwater supplies. Mixing and cleaning of equipment on an impervious pad such as concrete will help contain spills and prevent groundwater contamination. Do not contaminate water when disposing of equipment washwaters. When cleaning equipment, do not pour the washwater on the ground. Spray or drain over a large area away from wells and other water sources.

13. DISPOSAL CONSIDERATIONS

FOR LARGE SPILLS: Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures.

PRODUCT DISPOSAL: The Solaris Group is committed to responsible environmental practices and recommends that all of the product be used up, carefully following all label directions and precautions.

If necessary to dispose of partially filled product container, then securely wrap it in several layers of newspaper and discard in trash.

EMPTY CONTAINER: Do not reuse container. Rinse thoroughly before discarding in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)**PROPER SHIPPING NAME:** Not Regulated**PRIMARY HAZARD CLASS/DIVISION:** None**UN/NA NUMBER:** NONE**PACKING GROUP:** NO**U.S. SURFACE FREIGHT CLASS:** Tree or weed killing compounds, NOI, Density of 20 lbs. or greater per cu. ft.**AIR (ICAO/IATA)****PROPER SHIPPING NAME:** Not Regulated**SPECIAL SHIPPING NOTES:** The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA				
ACUTE:	CHRONIC:	FIRE:	REACTIVITY:	PRESSURE
YES	NO	NO	NO	GENERATING: NO

TSCA (TOXIC SUBSTANCE CONTROL ACT)**TSCA REGULATORY:** All non FIFRA regulated components are on the US EPA's TSCA Inventory List.**16. OTHER INFORMATION****HMIS CODES****FIRE:** 0 **HEALTH:** 3 **REACTIVITY:** 0 **PROTECTION:** -**NFPA CODES****FIRE:** 0 **HEALTH:** 2 **REACTIVITY:** 0 **SPECIAL:** -**APPROVAL DATE:** 09/11/1995

REVISION SUMMARY New MSDS

COMMENTS: For additional information concerning this product, call the SOLARIS Groups Consumer Helpline at 800-225-2883.

MANUFACTURER DISCLAIMER: This Material Safety Data Sheet (MSDS) contains health, safety and environmental information for you and your employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label. Information contained in this MSDS will help you to prepare for emergency response and to meet community right-to-know, emergency response and reporting requirements under SARA Title III and many other laws. Emergency response agencies and health care providers will also find this additional information useful.

Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved label copy. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Monsanto Company and The Solaris Group make no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determinations as to its suitability for their purposes prior to use. In no event will Monsanto Company or The Solaris Group be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.